

this little insect, as in the Behemoth, or the Leviathan. It is a flight high enough for the faculties of man to rise by contemplation to a competent knowledge of the meanest work God ever condescended to form. That which was not beneath the Majesty of God to make, can never surely be beneath the dignity of a rational creature to contemplate. I am,

My LORD,
*Your Lordship's most obliged, and
 most obedient humble Servant,*

Philip Skelton.

IV. *The Extract of a Letter from Dr. James Mounsey, Physician of the Czarina's Army, to Henry Baker F. R. S. concerning the Everlasting Fire in Persia.*

S I R,

*Read April 27.
 1748.*

AS you inform me any thing relating to the Natural History of *Persia* will prove agreeable, I have some time ago wrote to a couple of Gentlemen, a Physician and a Surgeon, both Men of Learning and Veracity, and my very intimate Friends, who are now with the Ambassador from this Court to *Persia*, and they, both have promised to communicate to me whatever they shall meet with remarkable in that Country,
 and

and you may depend on receiving from me all the Accounts they shall please to send.

In the mean while, as the Natural History of *Persia* is but little known, and the Authors of the *Universal History* have given no true Account of the *everlasting sacred Fire* which the *Gauers* worship, I shall now send you a Description thereof, which you may depend upon, as there was a *Russian* Army for some Years in the Kingdom of *Dagestan*, where that Fire is; and I took down what I am going to relate from the Mouths and Journals of many Officers that were there, and more particularly from what was communicated to me by *Archiatre Fischer*, who received an Account thereof from Dr. *Lerch*, Physician of that Army.

This perpetual Fire rises out of the Ground in the Peninsula of *Abscheron*, about twenty Miles from *Baku*, and 3 Miles from the *Caspian* Shore. The Ground is very rocky, but has a shallow Covering of Earth over it. If a little of the Surface be scraped off, and Fire be applied to the Hollow, it catches immediately, and burns without Intermision, and almost without Consumption; nor is ever extinguished, unless some cold Earth be thrown over it, by which it is easily put out.

There is a Spot of Ground, about two *English* Miles large, which has this very wonderful Property; and here is a *Caravansary*, round which are many Places where the Earth continually burns; but the most remarkable is a Hole about 4 Feet deep, and 14 Feet in Diameter. In this *Caravansary* live 12 *Indian Priests*, and other *Devotees*, who worship the Fire, which, according to their Traditions, has burnt

burnt many thousand Years. It is a very old vaulted Building, and in its Walls are a great many Chinks, whereto if a Candle be applied, the Fire catches instantaneously, and runs instantly wherever the Chinks communicate; but it may be easily extinguished: They have hollow Places in the House fitted to their Pots, which they boil without any other Fuel; and instead of Candles, they stick Reeds into the Ground; from the Tops whereof, upon applying Fire thereto, a white Flame immediately comes forth, and continues to burn without consuming the Reeds, until they think proper to extinguish it, by putting little Covers over them for that purpose.

They burn *Lime* of the Stones dug hereabouts, first making an Hollow in the Ground, and then heaping the Stones on one another. This done, on applying Fire to the Hollow, a Flame bursts out, and is dispersed at once with a very great Crack through the whole Heap of Stones; and after it has continued burning for three Days, the *Lime* is ready: But Stones placed in this Fire for setting their Pots on never turn to Lime; which cannot be made but by heaping them on one another. The Earth and Stone are no farther warm than where the Fire reaches: And what seems very well worth Observation, this Flame of Fire gives neither Smoke nor Smell, however great it be.

About an *English* Mile and half from this Place there are Wells of *white Naphtha*; which is exceedingly inflammable; and though the Flame of *Naphtha* affords both Smoke and Smell, it is highly probable the perpetual Fire I have been describing is owing to *Naphtha*, but so purified, in filtering through

through the Stone, that it becomes divested of all such Particles as produce Smoke or Smell. The Stone and Earth are grey in Colour, and saltish to the Taste; and indeed much Salt is found on this Peninsula of *Abscheron*. There is also a salt Lake, near the Side of which the *white Naptha* flows by five different Springs. This *Naptha* is made use of only in the medicinal Way. It is yellowish from the Spring, but when distilled resembles Spirit of Wine. They give it internally, for Gonorrhœa's, Disorders of the Breast, and for the Stone; and they apply it externally in gouty Cases, Contractions of the Sinews, and Cramps.

Black Naptha is produced 8 or 9 Miles from the perpetual Fire; it is thick, and being distilled grows not clear but yellow. About *Baku* there is some of it so thick, that they employ it for greasing Wheels: But the best and greatest Plenty, is at *Balachame*, where there are above 50 Springs, the greatest whereof produces every Day 500 *Batman*, each *Batman* containing ten *Russ* Pounds, which are somewhat less than *English* Weight. You hear it make a considerable Noise in rising out of the Ground, though the Spring be 20 Fathom deep.

In *Baku* they have little or no other Fuel to burn besides *Naphta*, but it must be mixed with Earth or Ashes to make it fit for Use. The Fire it makes is only good to boil with; and this Inconveniency attends it, that all their Food so boiled smells and tastes of *Naphta*. For baking and roasting they make use of *Abrotanum*, *Absynthium*, and such-like; but in general *Naphta* is their Fire.

You

You may depend on the Truth of this Account, and I hope it will be acceptable; the Hurry I am in, being Physician to the Army now on its March to the Assistance of the Allies, and to set out from this Place To-morrow, with the Commander in chief, who has been some time here indisposed, and under my Care, prevents me from adding any more at present; but you shall be sure to hear from me, when we are advanced into *Germany*. In the mean while, believe me to be sincerely,

Dear Sir,

Riga, Feb. 24.
1748.

Your most humble Servant,

James Mounsey.

V. *An Abstract of Mr. Bonnet, F. R. S. his Memoir concerning Caterpillars; drawn up in French by Mr. Abraham Trembley, F. R. S. here translated into English.*

Read April 27.
1748. **T**HE Paper lately communicated by the *President* from Monsieur *Bonnet* of *Geneva*, contains various Experiments he has made relating to the Respiration of Caterpillars.

Malpighi first discover'd, that those 18 Openings or Orifices, which are placed 9 on each Side of the Caterpillar, and which are called by the Name of *Stigmata*, serve to give Respiration to this Class of Animals.

Monfieur